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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/177,902 10/23/98 HOLMAN

D E-1658

EXAMINER

IM52/0409

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CINTINS I

ART UNIT

PAPER NUMBER

1724

DATE MAILED:

04/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/177,902

Applicant(s)

Holman et al.

Examiner

Ivars C. Cintins

Group Art Unit

1724



☒ Responsive to communication(s) filed on Jan 16, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Rigby. As pointed out in the previous Office Action, Applicant has admitted that column based separations employing a valve member comprising an axially moveable solid rod are known in the art. Accordingly, claims 1-17 appear to differ from these admittedly known separation techniques by the use of a valve having a rotatable rod having a "binary" end. Rigby discloses a valve member having a binary end, which valve member is rotated to control material flow through a column chamber. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the rotatable valve member of Rigby for the axially moveable valve member of the admittedly known system depicted in Figs. 4a and 4b, since this reference valve member is capable of controlling material flow through a column chamber in substantially the same manner as the valve

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member of the admittedly known system, to produce substantially the same results.

Applicant's arguments filed January 16, 2001 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that it would not have been obvious to substitute the valve of Rigby for the valve in the admittedly known system because the subject invention requires a flow path "partially obstructed" when a rod is in one angular orientation and "opened" in another angular orientation; and further argues that Rigby does not mention or suggest the use of such a "partially obstructed" flow path. It is pointed out, however, that although Rigby may fail to suggest operation of his device such that a "partially obstructed" flow path results, utilizing only completely open or closed flowpaths, one of ordinary skill in the art would readily recognize that the valve member of this reference device is clearly capable of providing a "partially obstructed" flow path by rotating the valve member such that only a portion of the opening in the valve body is aligned with the opening in the column. Since the admittedly known system clearly requires both a flowpath which is partially obstructed (see Fig. 4a) and a flowpath which is completely open (see Fig. 4b), and since the valve member of Rigby is inherently capable of providing both such flowpaths, as explained above, it

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would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the rotatable valve member of Rigby for the axially moveable valve member of the admittedly known system, as proposed above.

Applicant is again advised that claims 1-17 would be allowed if limited to the embodiment shown in Fig. 5c (i.e. that the matrix material is unpacked by rotating the column chamber with respect to the rod).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 9:30 AM to 6:00 PM.

The fax phone numbers for this art unit are: (703) 305-3599 for "Official" faxes after Final Rejection; (703) 305-7718 for all other "Official" faxes; and (703) 305-3602 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

I. Cintins  
April 8, 2001

*Ivars Cintins*  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**